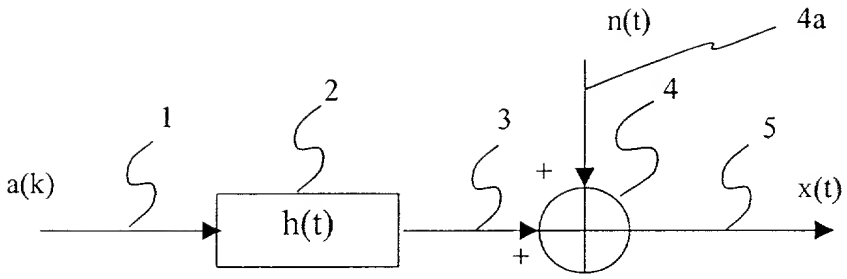


Figure 1

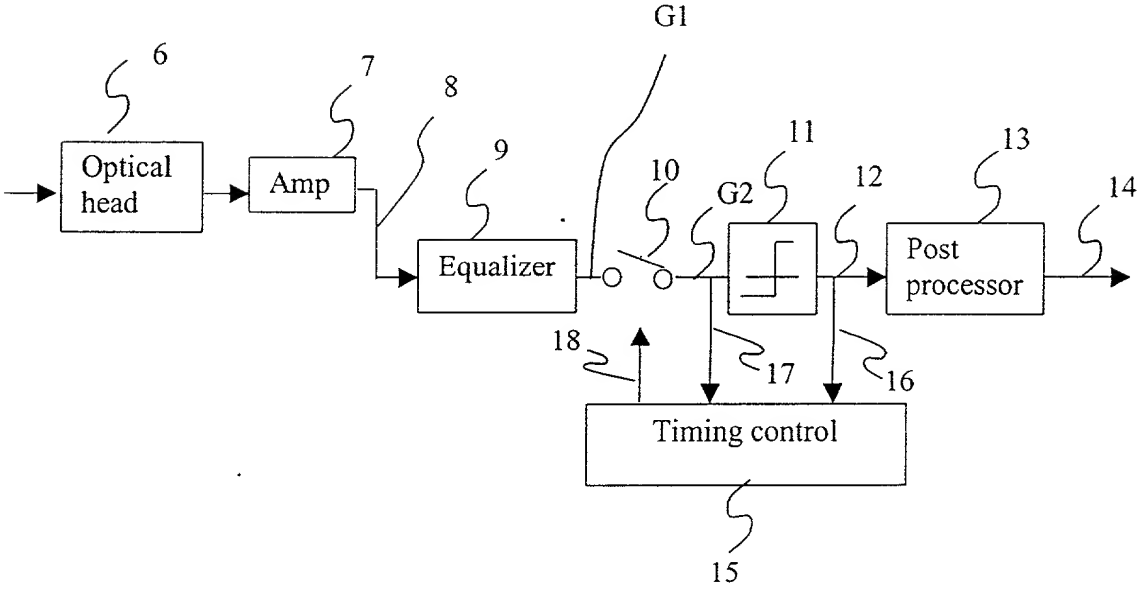


Figure 2

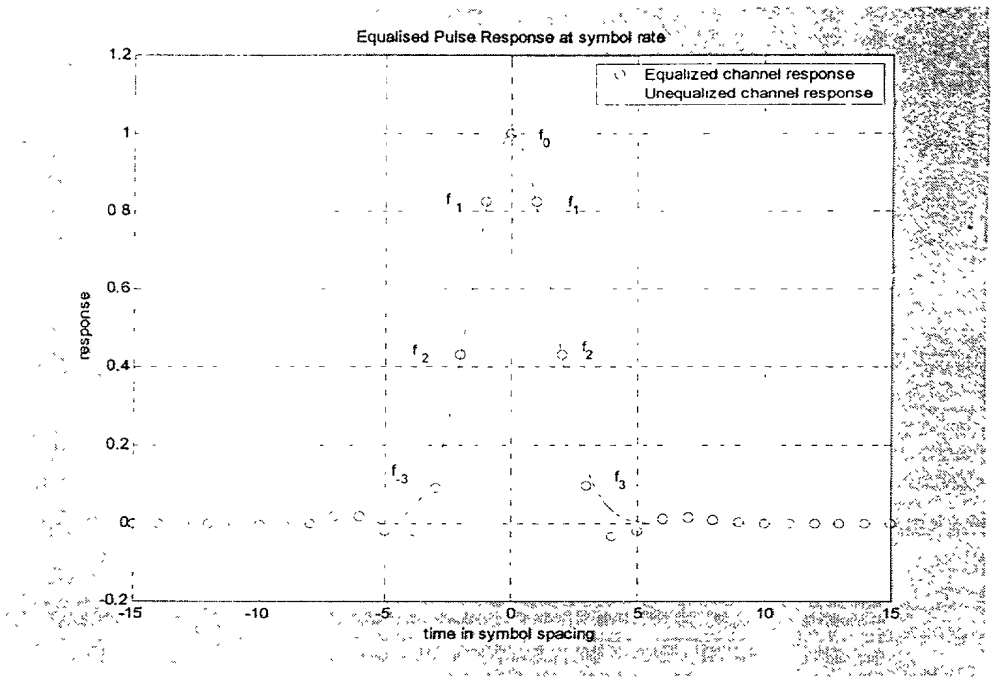


Figure 3

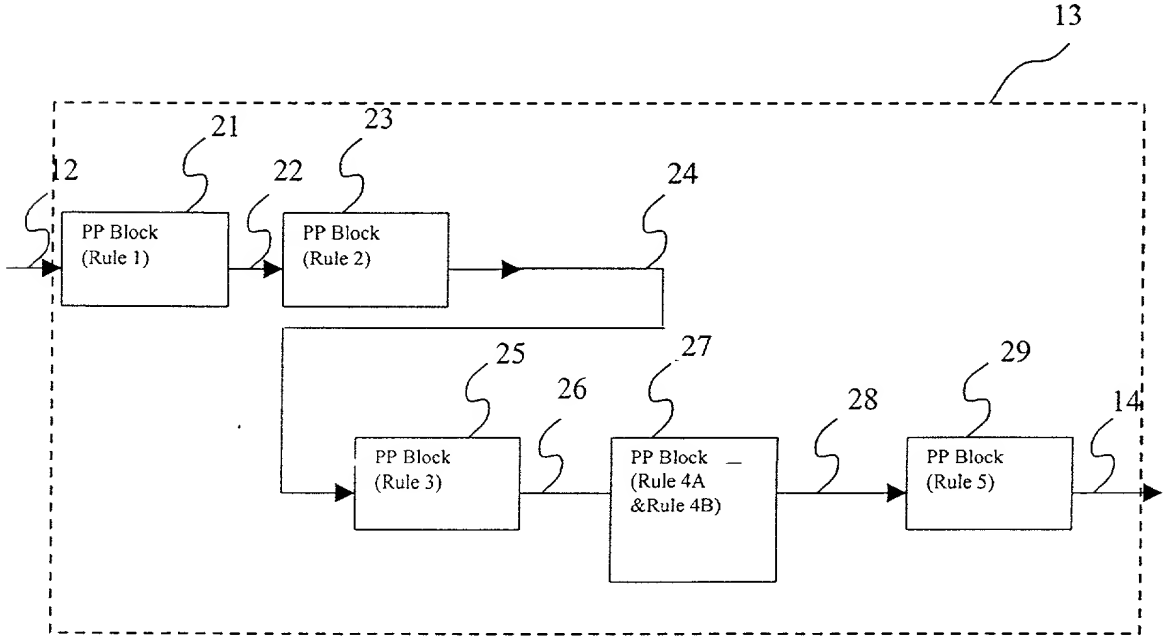


Figure 4

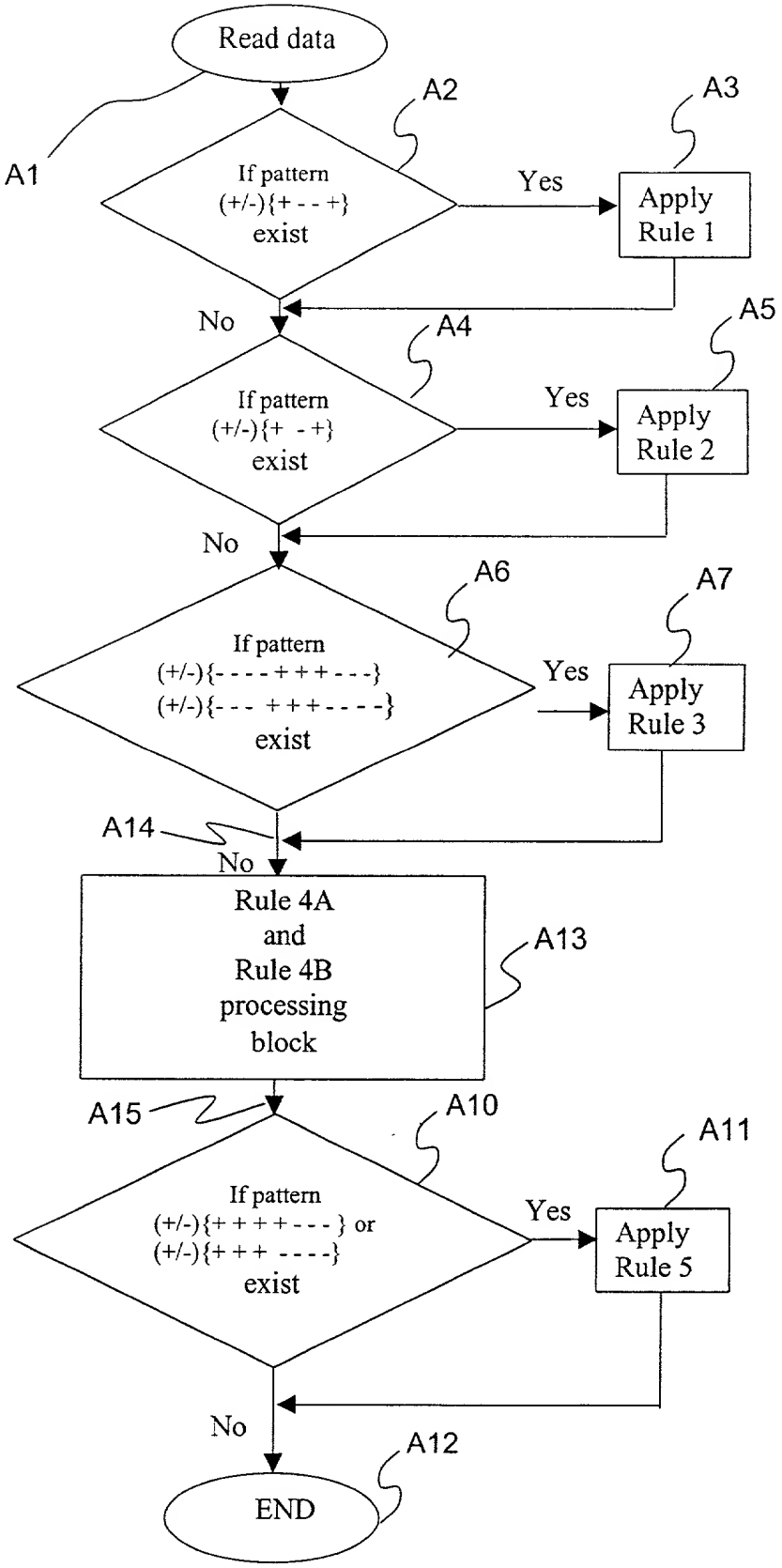

Read data
A1
A2
If pattern
(+/-){+ - - +}
exist
Yes
A3
Apply
Rule 1
No
A4
If pattern
(+/-){+ - +}
exist
Yes
A5
Apply
Rule 2
No
A6
If pattern
(+/-){- - - + + + - - -}
(+/-){- - - + + + - - - -}
exist
Yes
A7
Apply
Rule 3
A14
No
Rule 4A
and
Rule 4B
processing
block
A13
A15
A10
If pattern
(+/-){+ + + + - - - } or
(+/-){+ + + - - - -}
exist
Yes
A11
Apply
Rule 5
No
A12
END

Figure 5A

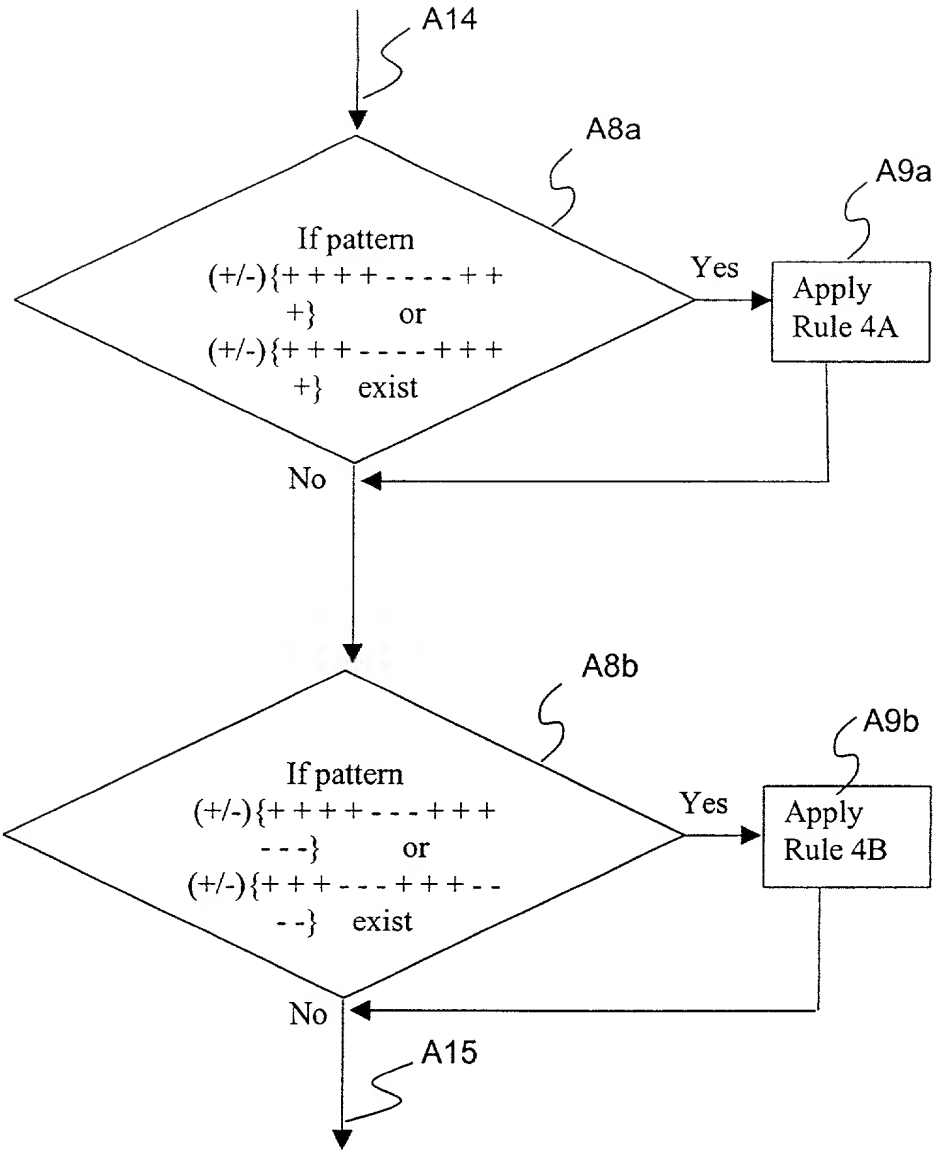

A14
A8a
A9a
If pattern
(+/-){+ + + + - - - - + +
+} or
(+/-){+ + + - - - - + + +
+} exist
Yes
Apply
Rule 4A
No
A8b
A9b
If pattern
(+/-){+ + + + - - - + + +
- - -} or
(+/-){+ + + - - - + + + - -
- -} exist
Yes
Apply
Rule 4B
No
A15

Figure 5B

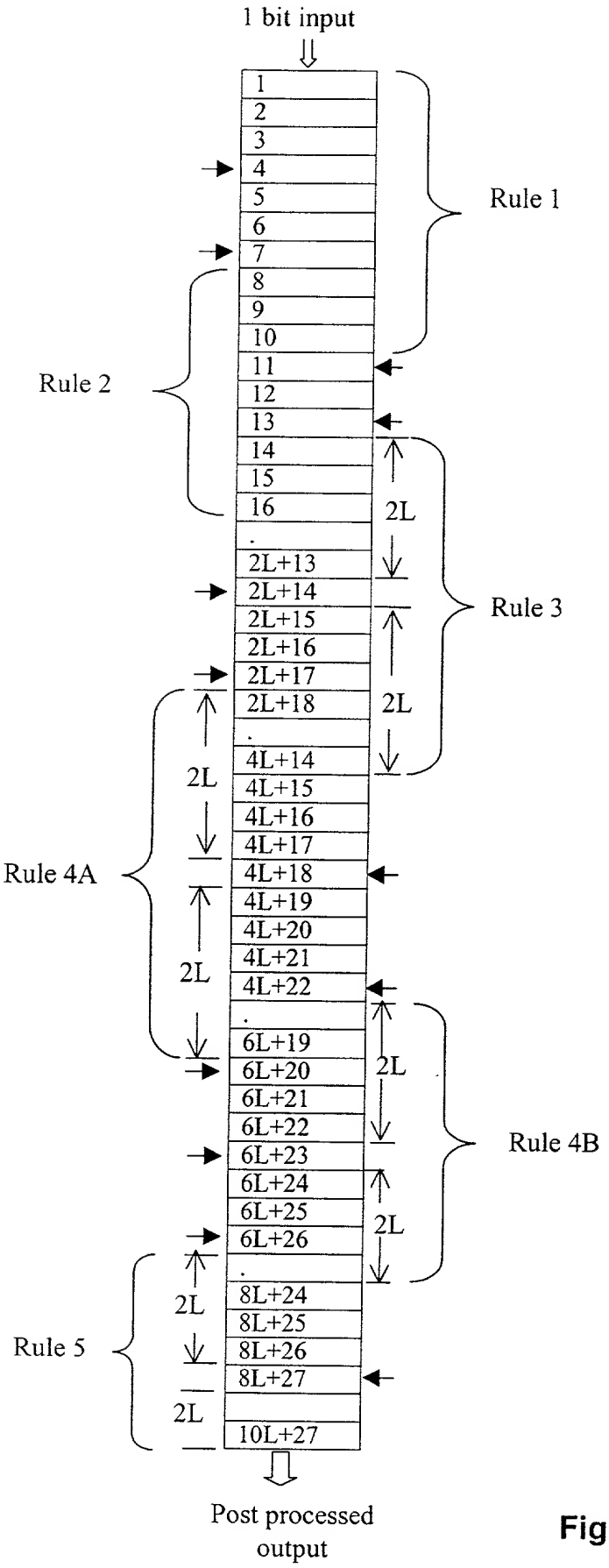

1 bit input
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
.
2L+13
2L+14
2L+15
2L+16
2L+17
2L+18
.
4L+14
4L+15
4L+16
4L+17
4L+18
4L+19
4L+20
4L+21
4L+22
.
6L+19
6L+20
6L+21
6L+22
6L+23
6L+24
6L+25
6L+26
.
8L+24
8L+25
8L+26
8L+27
10L+27
Rule 1
Rule 2
Rule 3
Rule 4A
Rule 4B
Rule 5
2L
2L
2L
2L
2L
2L
Post processed output

Figure 6A

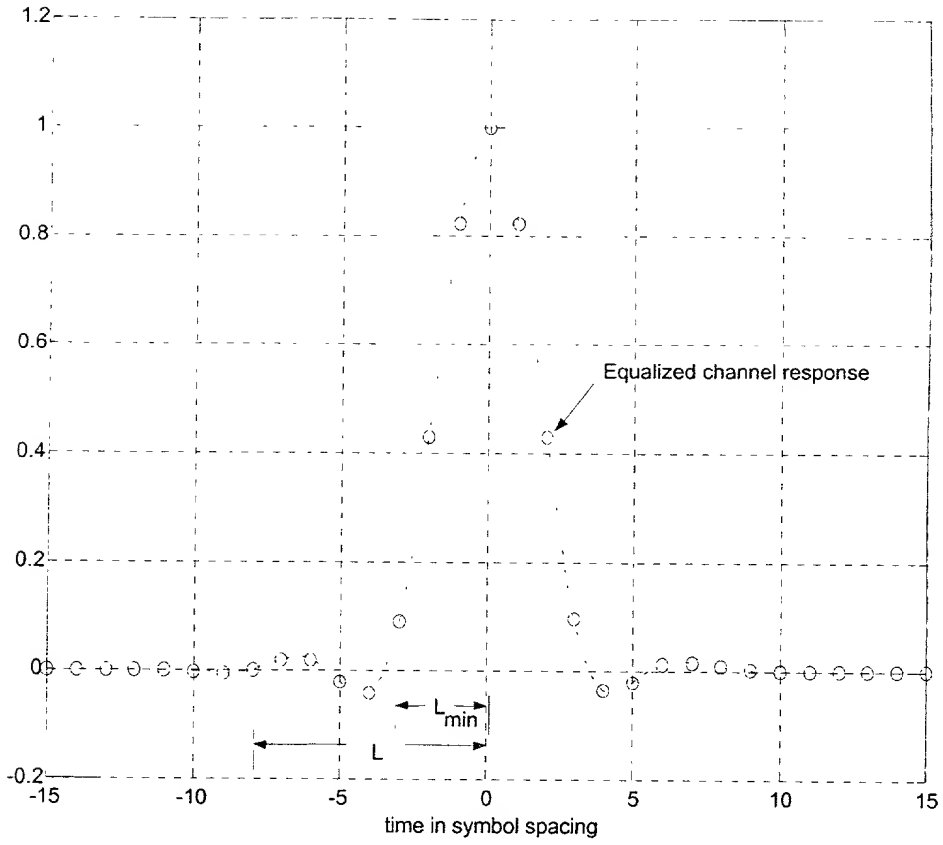
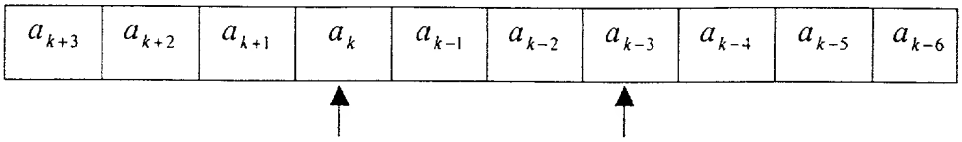

1.2
1
0.8
0.6
0.4
0.2
0
-0.2
-15
-10
-5
0
5
10
15
Equalized channel response
L min
L
time in symbol spacing

Figure 6B

Observation Window

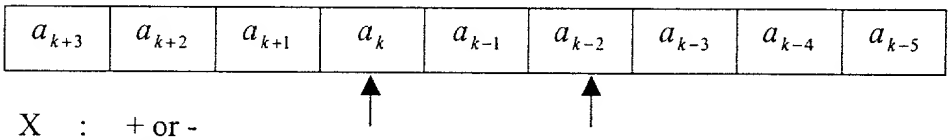


X : + or -

▲ : Location of probable change in sign

Figure 7

Observation Window

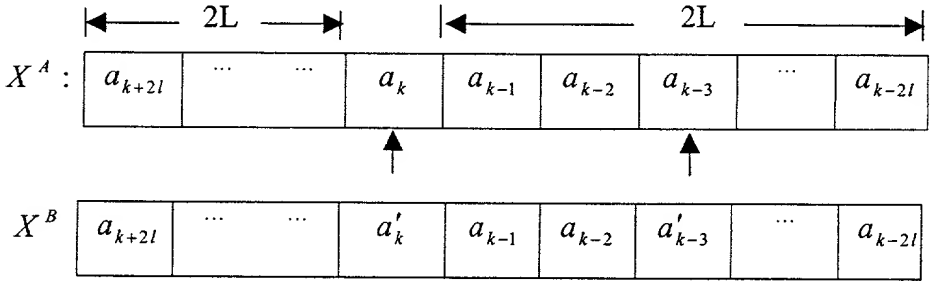


X : + or -

▲ : Location of probable change in sign

Figure 8

Observation Window

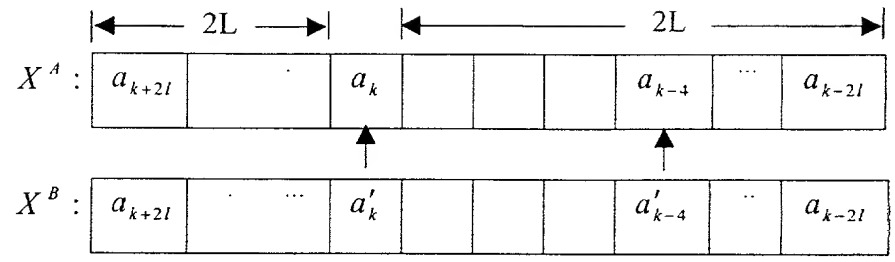


$(\cdot)'$: Compliment of $(\cdot)$

▲ : Location of probable change in sign

Figure 9

Observation Window

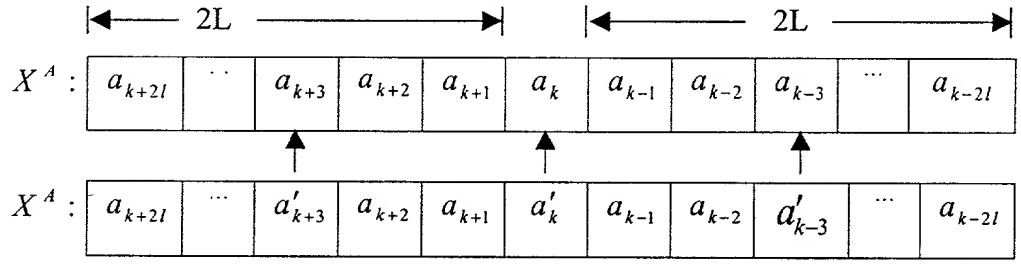


$(\cdot)'$: Compliment of $(\cdot)$

↑ : Location of probable change in sign

Figure 10A

Observation Window

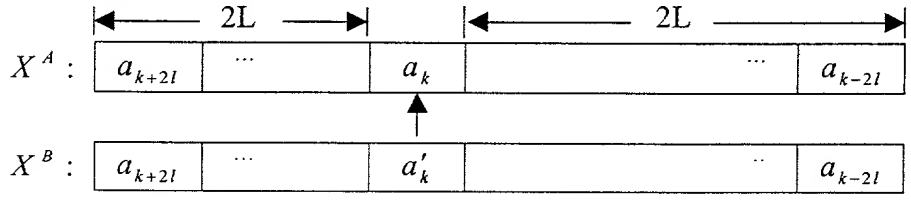


$(\cdot)'$: Compliment of $(\cdot)$

↑ : Location of probable change in sign.

Figure 10B

Observation Window



$(\cdot)'$: Compliment of $(\cdot)$

↑ : Location of probable change in sign

Figure 11

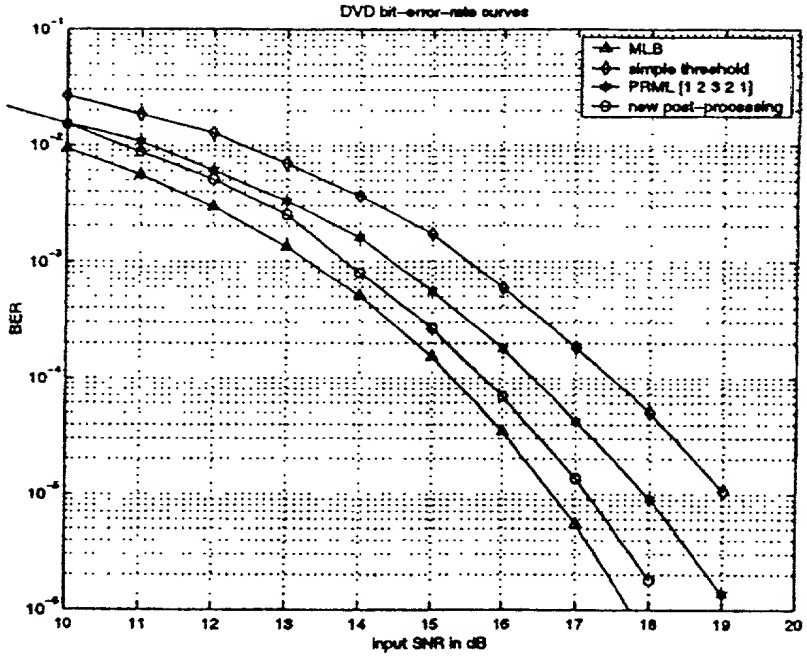


Figure 12

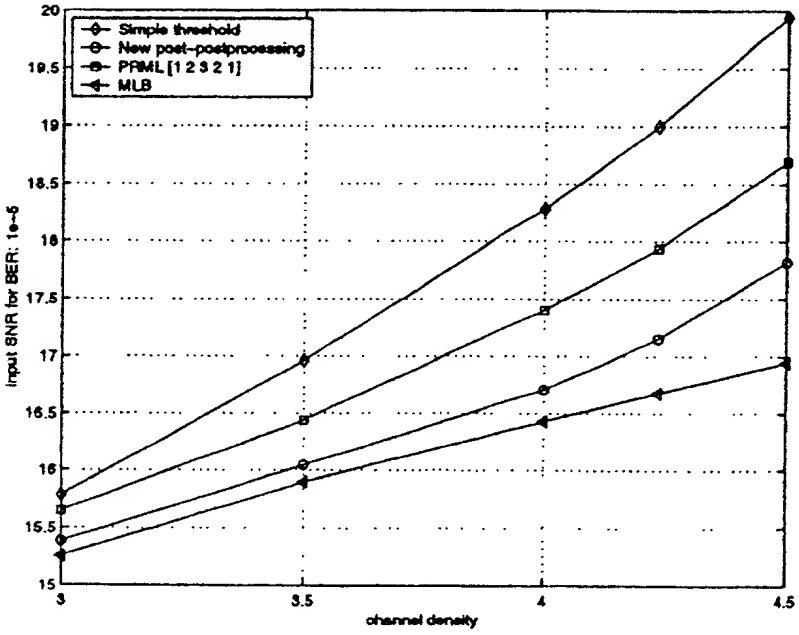


Figure 13